

biosimilars among their biologic-eligible RA patients, and their likelihood of use of biosimilars. Descriptive statistics are reported. **RESULTS:** A total of 173 rheumatologists participated in the survey. Years of experience practicing rheumatology was: <=1yr:0%, 2-5yrs:6%, 6-10yrs:17%, 11-20yrs:42%, >20yrs:32%. Geographic distribution of rheumatologists was: SEU-58%, Brazil-23%, Japan-11% and China-9%. Mean RA patient-volume/year was 291 (SEU-329, Brazil-259, Japan-232 and China-189). Overall, 47% of rheumatologists reported that they would prescribe a biosimilar to their eligible RA patients "definitely or highly likely" (SEU:58%, Brazil:21%, Japan:47%, China:47%); 51% of rheumatologists reported that they would try using biosimilars for 1-2 yrs among a small group of patients in their practice before starting to use it in a majority of biologic-eligible RA patients in their practice (SEU:60%, Brazil:33%, Japan:42%, China:47%). The top-5 factors that would prevent them from using biosimilars were diverse across the countries (Overall/SEU/Brazil/Japan/China): Doubts in similarity to original molecule 60%/63%/67%/47%/33%), inadequate safety/efficacy profile/data (53%/51%/51%/58%/60%), lack of long-term data (46%/51%/41%/32%/40%), lack of national guidelines recommending the use of biosimilars (37%/39%/31%/32%/47%) and lack of data from local country/market (31%/23%/41%/42%/47%). **CONCLUSIONS:** Across markets, over half of the rheumatologists expressed concerns/reservations towards prescribing biosimilars to their eligible RA patients. While payer organizations look to biosimilars to contain costs and make medicines more affordable to RA patients in need, potential barriers to biosimilar adoption may exist.

## PSY65

### BARRIERS TO BIOLOGIC THERAPY USE FOR AUTOIMMUNE DISORDERS IN EMERGING MARKETS

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**OBJECTIVES:** Biologic therapy is increasingly used to treat autoimmune disorders in developed markets, but usage is still low in emerging markets. This analysis was conducted to identify factors associated with current use of biologic medication among patients with autoimmune disorders in emerging markets. **METHODS:** Data were from the Brazil, China, and Russia National Health and Wellness Surveys, cross-sectional surveys representative of the total adult population (Brazil) or urban adult population (China and Russia) in each country, conducted in 2011 and 2012. Respondents self-reporting physician diagnosis of ankylosing spondylitis, Crohn's disease, psoriasis, psoriatic arthritis, rheumatoid arthritis, or ulcerative colitis and using a prescription medication (Rx) for at least one of those conditions were included; patients with missing data for any covariate were excluded. Binomial logistic regression included the following predictors: age, sex, country, income, Charlson Comorbidity Index (CCI), body mass index (BMI), monthly out of pocket (OOP) costs for Rx, fear of needles, condition severity, length of diagnosis, and type of treating physician. **RESULTS:** Of 1,507 respondents included in the analysis, 300 (19.9%) were using a biologic. Of those, 82.0% (n=246) were in China. Relative to China, patients were less likely to use biologics in Brazil (OR 0.21; 95% CI: 0.13, 0.36) and Russia (OR: 0.29, 95% CI: 0.18, 0.46; ps<0.001). Higher CCI was associated with use of biologics (OR: 1.18, 95% CI: 1.10, 1.26; p<0.001), as were higher OOP costs (OR: 2.37, 95% CI: 1.04, 5.42; p<0.05) compared to no OOP costs. Fear of needles was positively associated with biologic use (OR: 1.57, 95% CI: 1.18, 2.09; p<0.01). No other covariates were significant. **CONCLUSIONS:** Country was by the strongest predictor of biologic use in patients with autoimmune conditions in emerging markets, but higher costs and more comorbidities were associated with biologic use across emerging markets.

## PSY66

### DISEASE STATUS, TREATMENTS AND OUTCOMES OF PATIENTS WITH ANKYLOSING SPONDYLITIS RECEIVING THEIR FIRST BIOLOGIC IN THE UNITED STATES AND EUROPEAN UNION

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**OBJECTIVES:** To compare the disease status, treatments and outcomes of patients with AS receiving their first biologic in UK, Germany, France, Italy and Spain (SEU) with the US. **METHODS:** A multi-country multi-center medical chart-review study of AS patients was conducted between October-December 2012 among physicians (rheumatologists: SEU: 97%, US: 99%) in hospitals and private practices to collect de-identified data on AS patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice and patient volume and recruited from a large panel to be geographically representative in each country. Eligible AS patient charts (>2) were randomly selected from a sample of prospective patients visiting each center/practice during the screening period. Physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease status/outcomes. **RESULTS:** Seven hundred and ninety seven eligible AS patient charts (SEU:613, US: 184) were abstracted; 701 (SEU:549, US: 152) patients were on their first biologic (mean-age: SEU:42.5yrs/US:42.4yrs; female: SEU:16.2%/US:17.1%). Time-to-1<sup>st</sup> biologic from diagnosis (SEU:55.3months/US:46.8months) and time-on-current biologic (SEU:31.7months/US:44.3months) differed between regions. Top-2 biologic treatments observed were – adalimumab (SEU:43%/US:35%) and etanercept (SEU:30%/US:41%). Among the top-3 reasons for biologic treatment initiation, 'mechanism of action' & 'improve signs/symptoms' were observed in both SEU and US, whereas 'positive personal experience' (SEU) and 'prevention of structural damage' (US) were also observed. Key lab measures documented were: ESR (SEU:17.4mm/h, US:20.9mm/h) and CRP (SEU:8.8mg/dl, US:2.7mg/dl). Current disease severity per physician-judgment (mild/moderate/severe) was: SEU-63%:32%:6%, US-62%:34%:5%. Among patients with available data, current HAQ (SEU:1.3, US:0.8), BASDAI (SEU:2.9, US:3.4), VAS provider score (SEU:2.9, US:2.5), VAS patient score (SEU:3.0, US:2.7), Swollen Joint Count (SEU:1.3, US:0.5), and Tender Joint Count (SEU:2.0, US:0.9) differed across regions. **CONCLUSIONS:** Among AS patients receiving their first biologic, disease severity differed between SEU and US, with patients in SEU with relatively higher burden and poorer outcomes.

## PSY67

### VARIATIONS IN TREATMENT PATTERNS AND DISEASE SEVERITY AMONG PATIENTS WITH PSORIASIS RECEIVING THEIR FIRST BIOLOGIC IN EUROPEAN UNION

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**OBJECTIVES:** To assess the treatment patterns and current disease severity of patients with PsO receiving their first biologic in SEU, namely, UK, Germany (DE), France (FR), Italy (IT) and Spain (SP). **METHODS:** A multi-country multi-center medical chart-review study of PsO patients was conducted among dermatologists in hospitals/private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for practice-duration (3-30 yrs) and patient-volume (incl.>2PsO biologic patients/month) and recruited from a large panel to be geographically representative in each country. Physicians abstracted charts of next five consecutive biologic patients within each center/practice. Physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease severity. Results from patients on first biologic treatment were analyzed. **RESULTS:** In 4Q2012, 225 physicians abstracted 924 eligible PsO patient charts; 690 (75%) were on their first biologic (mean-age:46.9yrs, female:36%). Geographic distribution-UK:18%, DE:21%, FR:19%, IT:21%, SP:21%. Time-to-1<sup>st</sup> biologic from diagnosis (months)/time-on-current biologic (months) varied- UK:140/17, DE:119/10, FR:138/15, IT:103/18, SP:127/17. Top-4 first-line biologic treatments observed were etanercept, adalimumab, infliximab and ustekinumab. Treatment experience prior to first biologic varied dramatically (not mutually exclusive): Immunomodulators-UK:92%,DE:51%,FR:68%,IT:73%,SP:76%; phototherapy-UK:55%,DE:71%,FR:59%,IT:32%,SP:37%; topicals-UK:41%,DE:69%,FR:46%,IT:43%,SP:39%; retinoids-UK:29%,DE:30%,FR:34%,IT:42%,SP:40%; fumerates-UK:13%,DE:69%,FR:0%,IT:1%,SP:0%; corticosteroids-UK:2%,DE:32%,FR:10%,IT:14%,SP:10%; Average # of flares in the past yr were: UK-1.0,DE-1.3,FR-1.1,IT-1.0,SP-1.6. Mean current PASI scores were: UK-8,DE-20,FR-12,IT-18,SP-11. Current disease severity per physician judgment was (remission/mild/moderate/severe): UK-45%/25%/20%/10%, DE-26%/19%/21%/35%, FR-42%/34%/15%/9%, IT-39%/19%/31%/11%, SP-44%/29%/26%/2%. Mean number of treatments prior to first biologic varied by current disease severity (remission/mild/moderate/severe): UK-2.7/3.1/2.6/3.1, DE-3.0/3.7/2.7/4.1, FR-2.2/2.6/2.2/2.4, IT-2.2/2.2/2.3/2.1, SP:2.4/2.2/3.2/3.3. **CONCLUSIONS:** Among PsO patients receiving their first biologic, treatment patterns and disease severity varied across SEU, with patients in Germany disproportionately experiencing higher disease burden. Factors influencing the observed variations in care and optimal therapeutic approaches (including treatment sequencing) aligned with clinical guidelines to decrease patient disease burden warrants scrutiny.

## PSY68

### PHARMACOTHERAPY COSTS OF MULTIPLE MYELOMA IN THE CZECH REPUBLIC: A RETROSPECTIVE ANALYSIS

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**OBJECTIVES:** In the Czech Republic there are three modern molecules available for the treatment of multiple myeloma: bortezomib, thalidomide and lenalidomide. In order to better understand this evolving specific market, analysis of consumption trends has been conducted with emphasis on the molecules' mutual influence. **METHODS:** Time-consumption curves of bortezomib, lenalidomide and thalidomide since 2009, based on the economic data of the General Health Insurance Company of the Czech Republic, were analyzed. While there was reimbursement for thalidomide in the first line treatment and bortezomib in the second line in 2009, we focused on and evaluated the impact of the launch of lenalidomide in 2009 (as a second line treatment). We also investigated the extension of reimbursement of bortezomib for the use in the first line in 2010. **RESULTS:** The introduction of lenalidomide (2009) led to a rapid decline in thalidomide consumption within the next year, in contrast to bortezomib, the consumption of which appeared unaffected. Furthermore, also the consumption of thalidomide decreased profoundly following the extension of reimbursement conditions of bortezomib (2010). The overall relative reduction in thalidomide consumption observed within the two years between 2009 and 2011 was 70%. **CONCLUSIONS:** The presented retrospective analysis shows that the impact of myeloma treatment on payers' financial budgets has increased nearly 3-times in the last four years. The extension of reimbursement of bortezomib had a clear impact on the consumption of thalidomide, which was its supposed comparator in the first line therapy. However, it appears that even though the introduction of lenalidomide did also significantly affect the consumption of thalidomide, it had no apparent impact on the use of bortezomib.

## PSY70

### APPETITE SUPPRESSANTS: A DRUG UTILISATION STUDY

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**OBJECTIVES:** To determine the prescribing and cost of appetite suppressants in a defined private sector patient population, as well as the prescribing of other medicines to the patient sample. **METHODS:** A retrospective drug utilisation study was conducted on a medical insurance claims database in South Africa for 2010 and 2011. No clinical information was available in the database. **RESULTS:** In 2010, 37 patients (86.49% females) were prescribed 44 appetite suppressants at a total cost of R9813.39, of which 75.0% were for phentermine. The average age of patients was 40.95 (SD=12.37) years. In 2011, 27 patients (77.78% females) received 42 prescriptions for appetite suppressants at a total cost of R9967.73. The average age of patients was 40.04 years (SD=10.41) (females: 37.95 (SD=7.76) years; males 47.33 (SD=10.52) years). Most products (80.95%) were for phentermine, followed by d-norpseudoephedrine (14.29%) and diethylpropion (4.76). Prescribing patterns in 2010 and 2011 were similar. Appetite suppressants are strictly regulated in South Africa.